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BEFORE THE STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL

IN RE APPLICATION NO. 99-1

EXHIBIT ____ (DJ-T)

SUMAS ENERGY 2 GENERATION
FACILITY

APPLICANT'S PREFILED DIRECT TESTIMONY

WITNESS # 1: DARRELL JONES

Q. Please introduce yourself to the Council.

A. My name is Darrell Jones. I am president of Sumas Energy 2, Inc. (SE2) and National Energy Systems Company (NESCO).

Q. What is the subject of your testimony?

A. My testimony will address the following issues:

First, I will provide some background about the Applicant, Sumas Energy 2, Inc.

Second, I will describe the proposed project and our reasons for seeking certification from EFSEC.

EXHIBIT ____
DARRELL JONES
PREFILED TESTIMONY - 1

[31742-0001/DJones.doc]

PERKINS COIE LLP
1201 Third Avenue, Suite 4800
Seattle, Washington 98101-
3099
(206) 583-8888

1 Third, I will describe the economic advantages of the project.

2
3 Fourth, I will explain how SE2 intends to transmit the electricity produced by the
4
5 proposed facility.

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7 Fifth, I will describe the company's environmental commitment.
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11 **Background**
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13 **Q. What is Sumas Energy 2?**
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15 A. Sumas Energy 2 (SE2) is a corporation that was incorporated under the laws of the
16
17 State of Washington to develop, permit, own and operate the power plant at issue in
18
19 these proceedings. SE2 is one of several corporations affiliated with NESCO, another
20
21 Washington corporation based in Kirkland, Washington. NESCO and its affiliated
22
23 corporations own and/or operate a variety of commercial enterprises. For example,
24
25 NESCO affiliates own natural gas and oil reserves in British Columbia and Alberta, a
26
27 lumber operation in Washington, and power plants in Washington and California.
28
29 NESCO affiliates already own and operate two facilities in Sumas, Washington: the
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31 SOCCO lumber facility and the Sumas Cogeneration Facility.
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35 **Q. What other power facilities has NESCO or its affiliates developed?**
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37 A. NESCO and its affiliates have developed several power facilities: a natural-gas fired
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39 cogeneration plant in Washington, a natural gas-fired cogeneration plant in California,
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41 a coal-fired plant in Alaska, wood-fired plants in Michigan and Wyoming, and a
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43 wood and residue-fired plant in New Mexico.
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The Sumas Energy 2 Generation Facility

Q. Please describe the proposed project.

A. SE2 proposes to construct and operate a 660 megawatt combined-cycle, combustion turbine generating facility in Sumas, Washington. In addition to the power plant itself, SE2 proposed to construct a power transmission line from the facility to the U.S.-Canadian border, and a natural gas pipeline from the facility to the Westcoast Energy, Inc. pipeline at the border. The Application describes the proposed project in greater detail, as does the testimony of Dave Eaden.

The power plant will operate as a “merchant plant.” That means that the plant will be built to produce competitively priced electricity that can be sold on the open market. SE2 does not presently expect to negotiate long-term power sale contracts in advance of constructing the facility. Although long-term power purchase contracts were common a decade ago, the new competitive and deregulated electric power market allows a power plant developer to pursue projects that will produce low cost power that can be sold in the competitive market on even a daily basis.

Q. Why have you proposed this project?

A. There is currently a substantial need for additional electrical generating capacity in the Pacific Northwest. Jim Litchfield will testify about this need in considerable detail, but its clear to me, based on my experience in the industry, that there is a growing need for additional capacity in this region, and throughout the United States. Studies have reported growing demands for electricity in Washington and the Northwest. A Department of Energy study reported similar increases in electricity demand

1 throughout the nation, and predicted the need for additional power generating capacity
2 to keep pace with this growth in demand. (Excerpts of this study are attached as
3 Exhibit ____ (DJ-1).) The White Book published by the Bonneville Power
4 Administration (BPA) and the Northwest Regional Forecast published by the Pacific
5 Northwest Utilities Conference Committee (PNUCC) both concluded that there is a
6 growing gap between the supply and demand for electricity in this region. The
7 Northwest Power Planning Council has also recently warned of high probabilities of
8 loss of load on the system. Quite simply, there is a need and a market for additional
9 electrical generation capacity in this region.
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21 **Q. You have testified that there is a need for additional power in the region, but**
22 **some critics contend that additional power is needed in California, not**
23 **Washington. Is that true?**
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26 **A.** No. The demand for electricity is increasing in both Washington and California.
27 What these critics apparently do not understand is that power is sold and exchanged
28 between the Northwest and the Southwest on a seasonal basis. Peak demand in the
29 Northwest occurs during the winter, and power produced in California and the
30 Southwest is sent north during the winter to meet that demand. Peak demand in the
31 Northwest occurs during the summer, and power produced in Washington and the
32 Southwest is sent south during the summer to meet that demand. In a deregulated
33 market, these regional power exchanges help satisfy power demands in an efficient
34 manner.
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1 Despite these regional exchanges, however, additional generating capacity is needed
2 in the Northwest. I have already discussed the increasing regional demands for
3 power, but it is also true that the demand for power is increasing here in Washington.
4 A January 1999 report of the Washington Department of Community Trade and
5 Economic Development (CTED) reported increasing electricity consumption trends in
6 the State. A December 1998 report published by CTED and the Washington Utilities
7 and Transportation Commission concluded that there is a growing likelihood of
8 electricity shortages. This need for additional generating capacity has been the
9 subject of considerable discussion in the industry, and is reflected in the proposal of
10 several new power projects around the State.
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23 **Q. Some critics have also questioned why the power plant projects already**
24 **permitted by EFSEC – the Satsop project, the Chehalis project and the Cretson**
25 **project – have not been built if there is a need for additional power. What is**
26 **your explanation?**
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30 **A.** I cannot speak for the developers of those other projects, but I am convinced that there
31 is a market for electricity produced by a highly efficient, natural gas-fired power plant
32 in Washington. The developers of the Chehalis project apparently share this belief
33 because I understand that they are asking EFSEC to approve an even bigger plant than
34 they had originally proposed. Likewise, I understand that another developer has
35 begun an initial site investigation with EFSEC regarding a 1100 megawatt project in
36 Starbuck, Washington. As for the Satsop and Cretson projects, those projects might
37 be built in the future, or they might not. It will presumably depend upon whether the
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1 developers of those projects conclude that they can produce power that will be
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3 competitive in the new deregulated power market.
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6 **Q. Some critics have also suggested that Washington's increasing need for electrical**
7 **power could be met by alternative energy sources or conservation. Do you**
8 **agree?**
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12 A. No, I do not. The region currently faces a forecasted 2500-3700 megawatt power
13 deficit, and that deficit is predicted to reach the 3500-4500 megawatt range by 2003. I
14 do not believe it is realistic to assume that solar power, wind power, fuel cells,
15 conservation, or other alternative fuels will provide that much power in the near
16 future. I agree that those alternatives should be pursued – in fact, the funds that we
17 have proposed to devote to greenhouse gas mitigation projects could be used to fund
18 alternative energy projects – but those alternatives are not currently feasible or cost-
19 effective means of producing all of the electricity needed to satisfy growing demands.
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31 **Q. Having concluded that there is a need for additional electrical generation**
32 **capacity, why did you decide to propose a power plant project in Sumas?**
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35 A. There are really several reasons. I have long-standing ties to the area. My parents
36 grew up near Sumas, and I spent summers as a kid in Whatcom County. My family
37 has long operated a lumber mill in Darrington, and in the early 1990s, I developed a
38 lumber facility and a cogeneration plant in Sumas. In 1998, when we began
39 developing the proposal to build SE2, Sumas was a natural choice for the location.
40 We have been working in the community for many years and we have developed good
41 working relationships with the local government. The people of Sumas have been
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1 good neighbors to us, and we have tried to be good neighbors to them – providing
2 jobs, responding to any concerns about our facilities, and contributing to important
3 community needs. This project offered another opportunity to benefit the community
4 at a time when it needs an economic boost.
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10 As a practical matter, Sumas is also a good location for a power plant. It is located
11 near a major Canadian natural gas pipeline and a transmission station. As a result, the
12 facility will require only a 4.5 mile natural gas pipeline, and a 5.9-mile electric
13 transmission line. The City of Sumas has water available that it is willing to sell to an
14 industrial facility, and there was suitable property available within an area already
15 designated as industrial.
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25 Economic Benefits

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27 **Q. You testified that the project will provide economic benefits to people in the**
28 **Sumas area. What do you mean by that?**
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31 **A.** The proposed project would offer numerous economic benefits to the City of Sumas
32 and surrounding areas of Whatcom County. Some of the benefits are discussed in
33 detail in Section 8.1 of the Application.
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37 ▪ During peak construction periods, there will be 300-400 people working
38 on the project. The total construction payroll is estimated at \$30 million.
39 Non-salary construction expenses in Whatcom County will total an
40 estimated \$22 million.
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42 ▪ During operation, the facility will employ 23-25 people and have an
43 operating payroll of \$1.35 million per year. Employee salaries are
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1 predicted to result in \$1.1 million in spending. The facility will also
2 purchase approximately \$1.2 million a year in maintenance and supplies
3 from local suppliers.
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7 ■ The project will generate substantial tax revenue for state and local
8 governments. Construction and equipment purchases will generate
9 approximately \$22-24 million in state and local sales and use taxes.
10 During operation, the project will generate approximately \$4-5 million per
11 year in property taxes, \$3.3 million per year in natural gas use tax, and
12 \$1.78 million in sales, use and other business taxes.
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19 20 21 Transmission Route

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23 **Q. You testified that the Sumas location provides advantages from the standpoint of**
24 **transmitting the power you produce. Could you explain that?**

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27 A. We have proposed to build a 230 kV transmission line from the facility to BCHydro's
28 Clayburn Station, which is located across the border in British Columbia near
29 Abbotsford. The entire transmission line will be only 5.9 miles long, with only
30 approximately a half mile of the line located in the United States. The proposed line
31 would go through industrial and agricultural/rural areas of Sumas, and through
32 industrial and commercial areas of Abbotsford. Compared to many power plants, this
33 transmission line connection is very short. It, therefore, minimizes the cost as well as
34 the visual and land use impacts associated with transmission lines.
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1 **Q. Does the fact that you are proposing to build a transmission line to Canada mean**
2 **that you intend to sell the power produced to Canada?**

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5 A. No, not necessarily. The western United States and the Canadian provinces of British
6 Columbia and Alberta are connected by an electric transmission grid. This grid
7 makes it possible for the United States and Canada to share electric power, and for
8 power to be transmitted throughout the grid. SE2's proposed interconnection with the
9 BC Hydro Clayburn Station is the closest, most cost-effective interconnection point to
10 the electric grid, and it will allow SE2 to sell power to any utility in Washington State
11 or elsewhere in the western United States or Canada.
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21 **Q. Some critics have also claimed that it is not economical to transmit the electricity**
22 **through Canada, and these critics have claimed that you actually intend to**
23 **transmit the electricity on new lines built in Whatcom County. Is this true?**

24
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26 A. No. We have every intention of building the transmission line to Canada, and
27 connecting to the electric grid that way. We have requested a Presidential Permit to
28 authorize the border crossing, and we have been working with Canadian regulatory
29 authorities to obtain the necessary permits to construct the transmission line in
30 Canada. It is economically feasible to transmit the electricity to the Clayburn Station
31 in Canada. Changes are currently underway in the electric transmission industry that
32 should drastically reduce the transmission fees that are currently associated with
33 transmitting power in the Northwest, including Canada. The development of
34 Regional Transmission Organizations will make it even easier and more cost-effective
35 to deliver power to one point in the grid and sell it to anyone connected to the grid.
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1 **Q. Some critics have claimed that SE2 has no intention of transmitting power to**
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3 **Canada, and they point to the absence of any contract with BCHydro to buy SE2**
4 **power as proof of their point. How do you respond to that claim?**
5

6 **A.** It is not true. SE2 does intend to build the transmission line to Canada. As I have
7
8 explained, we believe it is the easiest and most cost-effective way to deliver the power
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10 to the electric transmission grid. We do not currently have a long-term power sale
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12 contract with BC Hydro or anyone else, because, as I explained before, we intend to
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14 operate the facility as a merchant plant, selling the power on the competitive open
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16 market, rather than being bound by long-term contracts. I should point out, however,
17
18 that although SE2 has not entered into a long-term contract with BC Hydro, SE2 has
19
20 filed a request for long-term transmission service with BC Hydro. A copy of that
21
22 request is provided as Exhibit ____ (DJ-2).
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27 **Q. Do you intend to transmit the electricity on new lines built across Whatcom**
28 **County – such as those discussed in the DEIS?**
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30 **A.** We have no intention of building transmission lines in Whatcom County, and we are
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32 not aware of any other entity that is currently planning to do so.
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Diesel Tank

Q. Will you have a diesel storage tank located at the facility?

A. Yes. We have proposed to locate a 2.5 million gallon storage tank for No.2 diesel fuel that will be used as a back-up fuel supply for the facility.

Q. Why do you need a backup fuel supply?

A. Natural gas pipelines have limited capacity. During periods of peak demand, which typically occur during a cold snap, there is not enough capacity to transport all of the natural gas that is needed to meet increased heating demands from homes and hospitals as well as existing commercial demands. As a large natural gas user, the power plant will have the capability to use back-up diesel fuel during these periods, so that the plant can free up capacity on the natural gas pipeline to meet other needs. It is really a public policy matter – trying to make sure that during a cold snap there is enough natural gas available to meet residential needs while still being able to produce enough electricity to satisfy the heightened electrical demands that occur at the same time.

Q. Is this sort of back-up capability unusual for a facility of this type?

A. No. To the contrary, it is accepted practice. To my knowledge, most natural gas-fired power plants in the region are capable of operating on a back up fuel supply.

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3 **Environmental Commitment**
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5 **Q. Is SE2 committed to building this facility in a way that is sensitive to**
6 **environmental issues?**
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9 A. Yes. We are committed to complying with the applicable environmental regulations,
10 and in many cases we have voluntarily proposed to exceed those regulatory
11 requirements. Our commitment is reflected in all of the specific mitigation proposals
12 described in the Application. The following are just a few examples:
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16 (1) We have retained McCulley Frick and Gilman to perform some of the
17 most extensive air emissions modeling ever performed in Washington. That
18 analysis demonstrates that the facility will be the cleanest power plant in
19 Washington state. For example, the facility will set a new standard for nitrous
20 oxide (NOx) control at 3 ppm, and it will produce less greenhouse gases per
21 kilowatt hour of electricity produced. Eric Hansen will address these issues in
22 greater detail.
23

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25 (2) We have retained Dames & Moore to develop a greenhouse gas mitigation
26 plan, even though there is no federal or state requirement to do so. We have
27 voluntarily committed to spend \$1 million on greenhouse gas mitigation
28 projects. Something no other power plant has been required to do and that no
29 other project applicant has volunteered to do.
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32 (3) We have retained Bexar Environmental Consulting to develop a wetland
33 mitigation plan. Under the plan, we will devote almost a third of the facility
34 property to a wetland preservation area, creating, enhancing and preserving
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1 high quality wetlands in mitigation for the small area of relatively low quality
2 wetlands filled to construct the facility.
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4 (4) We have retained CH2M Hill to design the natural gas pipeline and we
5 have worked with the WUTC to incorporate safety features that extend far
6 beyond regulatory requirements and standard industry practices.
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8 These are only a few examples of our commitment to developing this project in a way
9 that is sensitive to environmental issues.
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17 **Q. Some critics of the project have argued that EFSEC should not permit any more**
18 **fossil fuel-fired power plants. Do you agree?**

19
20 A. No. As long as we continue to use more electricity, more power plants will be built.
21 The question is really what kind of power plants should be built and where. This is
22 the kind of power plant EFSEC should permit. It will be the most efficient power
23 plant in the state – operating at around 53% efficiency – which means it will generate
24 power using less fuel and emitting less air pollution. Natural gas burns cleaner than
25 other fossil fuels, and the plant will incorporate the latest pollution control
26 technology, making it the cleanest plant in the state. Sumas is also an excellent
27 location for the power plant. The plant will be located in an industrial area, next to
28 other industrial facilities, and will have minor impacts at the site. The power plant
29 will be close to an existing natural gas pipeline and an electrical station for power
30 transmission.
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END OF TESTIMONY

I declare under penalty of perjury that the above testimony is true and correct
to the best of my knowledge.

DATED: April 15, 2000.

By _____
Darrell Jones